be performed by said computation means with a plurality of
processing timings in a plurality of processing units each
corresponding to a process performed on n bits of pre-encoding
data, wherein each of said plurality of processing units is
parallel processing performed on a plurality of computation
results obtained for 2^n states with one of said plurality of
processing timings immediately preceding a present timing of
said plurality of processing timings to obtain computation
results with said present processing timing for said 2^n states.

--2.   (Amended) The decoding apparatus according to claim
1, further comprising a memory for storing said computation
results obtained with said immediately preceding processing
timing and said present processing timing, wherein during each
of said processing units said computation results obtained for
said 2^n states with said immediately preceding processing
timing are read from a storage area of said memory and said
computation results found with said present processing timing
for said 2^n states are stored in said storage area.

--3.   (Amended) A decoding method for performing a
maximum-likelihood decoding process based on a Viterbi
algorithm on a data train completing a convolution-encoding
process, comprising the step of performing a trellis
computation for decoding said data train completing said
convolution-encoding process with a plurality of processing
timings in a plurality of processing units each corresponding

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to a process carried out on n bits of pre-encoding data,
wherein each of said processing units is parallel processing
performed on a plurality of computation results obtained for 2^n
states with one of said plurality of processing timings
immediately preceding a present one of said processing timings
to find computation results with said present processing
timing for said 2^n states.

--4. (Amended) The decoding method according to claim 3,
wherein in each of said plurality of processing units each of
said plurality of computation results obtained for said 2^n
states with said immediately preceding processing timing are
read from a storage area of a memory, and said computation
results obtained with said present processing timing for said
2^n states are stored in said storage area.

--5. (Amended) A data-receiving unit having a decoding
unit for carrying out a maximum-likelihood decoding process
based on a Viterbi algorithm on a data train completing a
convolution-encoding process, said decoding unit comprising:
    computation means for carrying out a trellis computation
for decoding said received data train completing said
convolution-encoding process; and
    control means for controlling said trellis computation to
be performed by said computation means with a plurality of
processing timings in a plurality of processing units each
corresponding to a process carried out on n bits of

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pre-encoding data, wherein each of said plurality of
processing units is parallel processing performed on
computation results obtained for 2^n states with one of said
plurality of processing timings, immediately preceding a
present one of said plurality of processing timings to obtain
a plurality of computation results with said present
processing timing for said 2^n states.

--6. (Amended) The data-receiving unit according to
claim 5, further comprising a memory for storing said
plurality of computation results obtained with said
immediately preceding processing timing and said present
processing timing, wherein during each of said processing
units said plurality of computation results obtained for 2^n
states with said immediately preceding processing timing are
read from a storage area of said memory and said computation
results found with said present processing timing for said 2^n
states are stored said storage area.

--7. (Amended) A data-receiving method, comprising the
step of performing maximum-likelihood decoding processing
based on a Viterbi algorithm on a received data train
completing a convolution-encoding process, wherein in said
decoding processing a trellis computation for decoding said
data train completing said convolution-encoding process is
performed with a plurality of processing timings in a
plurality of processing units each corresponding to a process

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performed on n bits of pre-encoding data, and each of said

processing units is parallel processing carried out on a

plurality of computation results obtained for 2^n states with

one of said plurality of processing timings immediately

preceding a present one of said plurality of processing

timings to find said plurality of computation results with

said present processing timing for said 2^n states.

--8.   (Amended) The data-receiving method according to

claim 7, wherein in each of said plurality of processing units

said plurality of computation results obtained for said 2^n

states with said immediately preceding processing timing are

read from a storage area of a memory and said computation

results found with said present processing timing for said 2^n

states are stored in said storage area.--

REMARKS

Claims 1-8 remain in the application and have been

amended hereby.

As will be noted from the Declaration, Applicants are

citizens and residents of Japan and this application

originated there.

Accordingly, the amendments to the specification are made

to place the application in idiomatic English, and the claims

are amended to place them in better condition for examination.

An early and favorable examination on the merits is